

a1
cont
on the eccentric 506. The orbital body 510 has a sleeve portion 510a arranged on the eccentric 506, a radially extending end wall section 510b and an outer diameter cylindrical section 510c. The wall 510b carries pins 512 which are received in an opening 514 of an orbit control plate 516 which is fixed stationary in the casing (not shown) of the transmission of Figures 17 and 18.

Please amend the paragraph on page 34, beginning at line 29 and continuing on to page 35, as follows:

a2
The input shaft 500 has an end section 511 upon which is mounted an output shaft 530. The output shaft 530 has a flange section 532 which has holes 534. Mounted on the first eccentric 502 is an orbit control cylinder 540. The orbit control cylinder 540 has pins 542 at one end which engage in the openings 534 to control orbital motion of the cylinder 540. Arranged on the cylinder 540 is a forward motion pawl carrier 550 and a separate reverse motion pawl carrier 562. Two rows of pawls 552 and 554 are pivotally coupled on the pawl carrier 550 by pins 553. The pawls 552 carry shoes 555 which engage with assembler ring 556. The pawls 554 carry shoes 557 which engage assembler ring 558. Arranged between the assembler rings 556 and 558 is ring 560 and differential load distribution gear 580. As in previous embodiments, the ring 560 is fixed to the cylindrical portion 510c of the orbital body 510.

IN THE CLAIMS:

Please amend claim 1 as follows:

Claim 1 (amended) A transmission including:

an input means;

an output means;

a plurality of secondary members for supplying output

5 power for only part of each rotary cycle of the input means;

power transfer means for engagement with the plurality of secondary members;

the plurality of secondary members being coupled to one of the input means or the output means and the power transfer means being coupled to the other of the input means or the output means;

first orbital means for causing the plurality of secondary members to undergo orbital motion;

second orbital means for causing the power transfer means to undergo orbital motion so the combined orbital motions cause power to be transmitted from the input means to the output means;

phase changing means for changing the phase relationship of the orbital motions to, in turn, change the drive ratio of the transmissions.

Please cancel claim 3 without prejudice to its patentability.

Please amend claim 4 as follows:

Claim 4 (amended) The transmission of claim 1, wherein the orbital motion is one of a stationary, progressive or regressive orbital motion.

Please amend claim 6 as follows:

Claim 6 (amended) The transmission of claim 2, wherein the first orbital means comprising a pawl carriage for carrying the first and second sets of pawls, the pawl carriage having an epicyclic plate, an orbital control plate adjacent the epicyclic plate and orbit control means between the orbital control plate and the epicyclic plate.

Please amend claim 11 as follows:

Claim 11 (amended) A transmission including:
an input means;

an output means;

5 a plurality of secondary members for supplying output
power for only part of each rotary cycle of the input means;
power transfer means for engagement with the plurality
of secondary members, the power transfer means comprising a first
assembler ring and a second assembler ring;

10 the plurality of secondary members being coupled to one
of the input means or the output means and the power transfer
means being coupled to the other of the input means or the output
means;

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cont*
first orbital means for causing the plurality of
secondary members to undergo orbital motion; and

15 second orbital means for causing the power transfer
means to undergo orbital motion so the combined orbital motions
cause power to be transmitted from the input means to the output
means;

20 the second orbital means comprising an orbit body for
carrying the first and second assembler rings, the orbit body
having an epicyclic plate, an orbital control plate adjacent the
epicyclic plate and orbit control means between the orbital
control plate and the epicyclic plate.

Please amend claim 26 as follows:

Claim 26 (amended) The transmission mechanism including:

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an input power supply for supplying input rotary power;
an output power supply for providing rotary output
power;

5 a plurality of secondary members arranged between the
input power supply and the output power supply for transmitting
power from the input power supply to the output power supply, the
plurality of secondary members comprising at least a first array,
including at least one secondary member, between the input power
10 supply and the output power supply, and a second array including
at least one further secondary number between the input power

supply and the output power supply, the first and second arrays being in parallel with respect to one another;

power transfer means comprising a first assembler ring
15 for engagement with the first array of secondary members[;], and
a second assembler ring for engagement with the second array of
further secondary members;

the secondary members of the first array and the
secondary members of the second array being in engagement with
20 respective first and second assembler rings through only part of
each rotary cycle of the transmission mechanism; and

a load distributing gear engaged between the first and
second assembler rings for differentially distributing the load
taken by the secondary members between the said at least one
25 secondary member of the first array and the at least one further
secondary member of the secondary array.

Please amend claim 31 as follows:

Claim ~~31~~ (amended) The transmission of claim ~~30~~, wherein the
plurality of secondary members are constrained so as to only
engage the power transfer means in the region when the power
transfer means and secondary members are closest during orbital
5 movement of the secondary members and power transfer means.

Please amend claim 32 as follows:

Claim ~~32~~ (amended) The transmission of claim ~~30~~, further
comprising first orbital means for causing the secondary members
to undergo orbital motion and second orbital means for causing
the power transfer means to undergo orbital motion, the first and
5 second orbital means producing a double orbiting system and
wherein the double orbiting system produced by the first orbital
means and second orbital means provides two drive phases, one on
the closest approach side of the orbiting power transfer means to
the orbiting plurality of secondary members to produce a counter
10 phase orbit.